

I. General Remarks Concerning This Response

Claims 1-18 are currently pending. No claims have been amended, added, or canceled in this response.

5 II. Summary of the Present Invention

A frames-based Web browser is used with existing distributed computing environment (DCE) interfaces to facilitate and simplify management of DCE cells. In the preferred embodiment, administration may be performed from any secure Web browser acting as a client. Management data is typically supported on a target Web server. At the browser, CGI scripts are used to dynamically generate HTML (hypertext markup language) pages based on the network administrator's selections and the current state and defined objects in the DCE cell. The result is a robust and efficient Web-based DCE management scheme.

III. 35 U.S.C. § 102(e)-Anticipation-Rich et al.

The Office action has rejected claims 1-18 under 35 U.S.C. § 102(e) as being anticipated by Rich et al., "Method and apparatus for enabling a web server to impersonate a user of a distributed file system to obtain secure access to supported web documents", U.S. Patent No. 5,918,228, filed 01/28/1997, issued 06/29/1999. This rejection is traversed.

25 Rich et al. is a patent to International Business Machines (IBM), and IBM is the assignee of the present patent application. In addition, Rich et al. has at least one common inventor with the present patent application, and both Rich et al. and the present patent application concern

Web-technology-based solutions to problems that are related to distributed computer environment (DCE) cells. Hence, Rich et al. discloses some features that are also disclosed within the present patent application. In particular, Rich et al. discloses the use of a Web server to impersonate a user and obtain security credentials from a DCE security service so that a user at a client can access and view files from a distributed file system within a DCE. In a similar manner, the present invention also comprises a Web server that interacts with a DCE security service for the benefit of a user at a client.

However, the disclosure of the present patent application teaches features that are not disclosed within Rich et al., and the present patent application contains claims for features that are not taught in Rich et al., notwithstanding the anticipation rejection that argues to the contrary. Applicant asserts that there is more than one element of the independent claims that is not shown in Rich et al., thereby causing the anticipation rejection to be deficient.

In particular, independent claim 1 of the present application contains the following features: "responsive to user actions, displaying a plurality of Web pages in the browser from which the authenticated user manages the distributed computing environment" and "managing the distributed computing environment cell from the Web browser". While Rich et al. discloses the display of Web pages in a browser in which the Web pages have information from a DCE cell, Rich et al. does not disclose the feature of allowing a user to manage the DCE cell from within the Web page in the

browser, as required by the second element of claim 1, nor the feature of subsequently performing the management operation in the DCE cell, as required by the third element of claim 1.

Applicant asserts that the rejection incorrectly argues
5 the opposite when the rejection states that these features are shown in column 5, line 40, to column 6, line 15. The following portion (column 5, line 37, to column 6, line 20) of Rich et al. states (emphasis added):

10 The control flow associated with the invention is illustrated in the process flow diagram of FIG. 3. This figures illustrates the basic system of FIG. 1, with the inclusion of an account manager 56 having an associated database 58. Session manager 27 starts up upon
15 initialization of the Web server and is preferably run by the workstation computer 18. It includes its own storage area 29 for reasons to be discussed below. When the client 10 (through the browser 16) requests a DFS document (step a), the Web server 18 invokes a server
20 path check (using the SAF plug-in 25) (step b). The PathCheck checks with the session manager 27 to determine whether the user has appropriate DCE credentials. If not (step c), the SAF plug-in 25 will return an error message (e.g., "401; Unauthorized") to the browser 16 (step d) and prompt the user for user id and password. After
25 getting the userid and password from the user (step e), the SAF plug-in invokes the session manager 27 (step f) to obtain the DCE credential for the user. Session manager 27 returns the DCE credential to the Web server (step g). The server then uses this user credential to
30 represent the user to retrieve documents stored in DFS 50 (step h). After retrieving the documents, the account manager 56 is invoked (step i) (preferably using another API plug-in) to save appropriate usage information into the database 58 (step j).

35 The session manager 27 is thus invoked by the Web Server when a user attempts to access a DFS file. If a user has already been authenticated by DCE, the Session Manager 27 returns the user credential to the server, which uses this credential to retrieve DFS documents on
40 behalf of the user. If not, the Session Manager 27 will

login for the user and obtain the credential from DCE Security. The Session Manager maintains the in-memory database 29 to keep track of which user has logged in so that a user may access multiple DFS pages.

5 A detailed flowchart showing the operation provided by the Server Application Function (SAF) plug-in 25 and the session manager process 27 of the present invention is now illustrated in FIGS. 4-5. In general, it should be appreciated that the invention enables the Web server process 22 to impersonate a DCE identity. The method begins when a DCE principal name (actually the account name) first shows up at the Web server platform 12. In particular, at step 60, the routine passes the account name and password to the session manager for login request processing. FIG. 5 illustrates the process in detail. At step 61, a test is made to determine whether the account name and password are already in the session manager database 29. If the outcome of the test at step 61 is positive, the user has already been authenticated and the subroutine continues at step 64 to return the user's credentials to the calling process.

At most, Rich et al. discloses the display of DCE-cell-derived Web pages within a client browser. Rich et al. does not disclose managing the DCE cell through the client browser.

25 Applicant asserts that the argument against the rejection is strengthened by analyzing the use of Rich et al. against some of the features in the dependent claims. For example, dependent claim 2 states that an administration main menu Web page is displayed, and the rejection states that this feature is disclosed in the above-cited passage. Applicant asserts that a simple perusal of the passage illustrates that the feature is not disclosed.

30 Furthermore, dependent claims 3-6 have features concerning the selection of hypertext links that are associated with management command options. Applicant asserts

that a simple perusal of the passages of Rich et al. that are cited by the rejection quickly illustrates that Rich et al. does not disclose these features. For example, the rejection of claim 3 states that the feature of a hypertext link for a management command option is disclosed at column 8, lines 18-45 (emphasis added):

Further, although the invention has been described in terms of a preferred embodiment in a specific distributed file system environment, those skilled in the art will recognize that the invention can be practiced, with modification, in other and different hardware and operating system architectures with the spirit and scope of the appended claims. Thus, for example, while the present invention is preferably implemented to allow off-the-shelf browsers to access Web documents stored in DFS, the principles of the invention are equally applicable with other known architectures such as AFS (from which DFS was derived), as well as the Network File System (NFS) developed by Sun Microsystems. Moreover, implementation in OSF DCE is not a requirement of the present invention either.

Further, it should be appreciated that the browser, Web server and distributed file system architecture in which the present invention is implemented can be generalized as well. In particular, the Web server may be thought of as merely a "gateway" function to provide one or more users (the Web clients in the context of the invention) access to resources in some "environment" (e.g., the distributed file system) that may or may not be on a different machine. Thus, the present invention can be seen to provide an efficient way for any gateway function to rapidly modulate between the identities that it presents to the user (from the view of the user-space) and to the environment (from the view of the environment kernel).

Again, Applicant asserts that a simple perusal of the passage illustrates that the feature is not disclosed. Again, Applicant asserts that Rich et al. merely discloses the

display of DCE-cell-derived Web pages within a client browser.

The rejection concluded by stating that claims 7-18 contain features that are similar to the features of claims 1-6 and are similarly rejected; claims 7-12 are apparatus
5 claims that correspond to the methods of claims 1-6, and claims 13-18 are computer program product claims that correspond to the methods of claims 1-6. Applicant asserts that the arguments that have been given above for claims 1-6 are equally applicable to claims 7-18.

10 Therefore, Rich et al. does not disclose at least one element of independent claims 1, 7, and 13 and their dependent claims as is required for a proper anticipation rejection. As stated at MPEP § 2131: "A claim is anticipated only if each
15 and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*,
20 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Hence, the rejection of claims 1-18 is improper, and Applicant requests the withdrawal of the rejection.

IV. Conclusion


25 It is respectfully urged that the present patent application is patentable, and Applicant kindly requests a Notice of Allowance.

For any other outstanding matters or issues, the examiner is urged to call or fax the below-listed telephone numbers to expedite the prosecution and examination of this application.

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Respectfully submitted,

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